

September 14, 2017

BY ELECTRONIC FILING

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Implementing Earth Station Siting Methodologies, IB Docket No. 17-172

Dear Ms. Dortch:

On September 12, 2017, Hughes Network Systems, LLC, ("Hughes"); Inmarsat, Inc. ("Inmarsat"); WorldVu Satellites Ltd. d/b/a OneWeb ("OneWeb"); SES Americom, Inc. ("SES"); and O3b Limited ("O3b") (jointly, and including Telesat, the "Broadband Satellite Operators") met with staff from the FCC's International Bureau, Wireless Telecommunications Bureau, and Office of Engineering and Technology regarding the Broadband Satellite Operators' reply comments in the above-referenced proceeding.

International Bureau staff present in person were Jose Albuquerque, Chip Fleming, and Alyssa Roberts. Paul Blais of the International Bureau staff joined telephonically. Office of Engineering and Technology staff present in person were Bahman Badipour, Michael Ha, and Nicholas Oros. John Schauble of the Wireless Telecommunications Bureau staff was present in person. Stephen Buenzow, Tim Hilfiger, and Charles Oliver of the Wireless Telecommunications Bureau staff joined telephonically.

Hughes was represented by Brennan Price, Senior Principal Engineer, Regulatory Affairs. Inmarsat was represented by Giselle Creeser, Director, Regulatory. SES and O3b were represented by Philippe Secher, Senior Manager, Spectrum Management and Development, and Petra Vorwig, Senior Legal and Regulatory Counsel. OneWeb was represented by outside counsel Ashley Yeager of Sheppard, Mullin, Richter & Hampton LLP.

In the meeting the parties discussed the attached talking points, which were provided to those present in person, setting out the Broadband Satellite Operators' recommended guidelines for earth station siting in the 28 and 39 GHz bands.

Additionally, Ms. Yeager discussed the Broadband Satellite Operators' recommendation that applicants for earth stations within NGSO satellite systems should be allowed to use either a time invariant gain or time variant gain method to calculate a contour, provided that the applicant specify the minimum elevation angle for the operation of its earth station.

Pursuant to the Commission's rules, this notice is being filed in the above-referenced docket for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

/s/ Brennan T. Price

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Cc: Jose Albuquerque Bahman Badipour

Paul Blais Stephen Buenzow Chip Fleming Michael Ha Tim Hilfiger Charles Oliver Nicholas Oros Alyssa Roberts John Schauble

Attachment



A Flexible, Technology Neutral Siting Regime is Critical to Achieve the Benefits of 5G Across the United States

Broadband Satellite Operators

September 12, 2017

The FCC should establish guidelines that can be relied on by all users of the 27.5-28.35 GHz (28 GHz) band to ensure certainty. These guidelines should include:

- 1. Colocation of individually licensed earth stations should be encouraged but not mandated. Such co-location, where possible, would improve efficiencies for both satellite and UMFUS networks.
- 2. Use of the antenna patterns contained in Section 25.209 of the FCC's Rules should be permitted in the earth station license application. Measured or simulated antenna patterns may not be available at that time, so flexibility is required.
- 3. Applicants should use the propagation model described in International Telecommunication Union's Recommendation ITU-R P.452-16 for FSS earth stations communicating in either the 28 GHz or 37/39 GHz band. It has been well tested for operations between 100 MHz to 50 GHz.
- 4. Terrain and clutter should be included in calculating a proposed earth station's affected area in order to present the most accurate picture possible of the antenna's impact on the UMFUS license area.
- 5. Population coverage can be calculated using the census blocks published by the US Census and applying the actual area method, but an applicant should be able to provide additional, verifiable data to demonstrate the population coverage is in fact lower than predicted by applying the actual area method to census block data.